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11 **UNITED STATES DISTRICT COURT**

12 **NORTHERN DISTRICT OF CALIFORNIA, SAN FRANCISCO DIVISION**  
13

14 IN RE: TFT-LCD (FLAT PANEL)  
15 ANTITRUST LITIGATION

Master File No. C07-1827 SI

MDL No. 1827

16  
17 This Document Relates to:

**DIRECT PURCHASER  
PLAINTIFFS' CONSOLIDATED  
COMPLAINT**

18 ALL DIRECT PURCHASER ACTIONS  
19  
20

21 Plaintiffs (1) A.M. Photo & Imaging Center, Inc., (2) Andy Ciaccio d/b/a Art's TV  
22 & Appliance, (3) CMP Consulting Services, Inc., (4) Crago, Inc., (5) Home Technologies  
23 Bellevue LLC, (6) Nathan Muchnick, Inc., (7) Omnis Computer Supplies, Inc., (8) Orion  
24 Home Systems, LLC, (9) Phelps Technologies, Inc., (10) Royal Data Services, Inc.,  
25 (11) Univisions-Crimson Holding, Inc., and (12) Weber's World Company, individually  
26 and on behalf of a Class of all those similarly situated, bring this action for damages and  
27 injunctive relief under the antitrust laws of the United States against the defendants, and  
28 allege on information and belief as follows:

## I. INTRODUCTION

1. Plaintiffs bring this antitrust class action on behalf of all persons and entities who directly purchased a Thin Film Transistor Liquid Crystal Display ("TFT-LCD") panel, or a product containing a TFT-LCD panel, in the United States from the named defendants, any subsidiaries or affiliates thereof, or any co-conspirators as identified in this Complaint between January 1, 1996 and December 11, 2006 (the "Class Period"). TFT-LCDs are used in a number of products, including but not limited to, computer monitors, televisions, and cellular telephones. As used herein, "TFT-LCD Product" refers to TFT-LCD panels, and products containing TFT-LCD panels, manufactured by any of the named defendants or their subsidiaries, affiliates, or co-conspirators.

2. As explained in further detail below, TFT-LCD panels are made by sandwiching liquid crystal compound between two pieces of glass called substrates. The resulting screen contains hundreds or thousands of electrically charged dots, called pixels, that form an image. This panel is then combined with a backlight unit, a driver, and other equipment to create a "module" allowing the panel to operate and be integrated into a television, computer monitor, or other product.

3. TFT-LCDs are manufactured in fabrication plants, or "fabs" as they are known in the industry. Fabrication plants are very expensive. The number of panels produced has a direct and significant effect on the price of both raw TFT-LCDs as well as the applications into which they are placed. Although TFT-LCD panels are used in different applications, the TFT-LCD production process is such that manufacturers' output and prices can be measured in a consistent and homogenous way. These and other conditions in the TFT-LCD industry enabled the price-fixing conspiracy detailed in this Complaint. In particular, these conditions enabled defendants to engage in direct discussions about the prices to be charged for TFT-LCD Products. Additionally, these conditions made it economically feasible to maintain artificially high prices through manipulation of supply.

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4. Throughout the Class Period, defendants' conspiracy was effective in moderating the normal downward pressures on prices for TFT-LCD Products caused by periods of oversupply and technological change. Defendants' conspiracy resulted in unusually long periods of high prices and high profits. Although there were temporary periods when prices for TFT-LCD Products declined as a result of new entrants being assimilated, or breakdowns in the effectiveness of the conspiracy, those price declines were from levels that had been set conspiratorially high, rather than from levels set by free and open competition. In addition, prices declined less than what they would have in a competitive market. As a result of defendants' unlawful conduct, plaintiffs and members of the Class paid higher prices for TFT-LCD Products than what they would have paid in a competitive market.

## II. JURISDICTION AND VENUE

5. Plaintiffs bring this action to obtain injunctive relief and to recover damages, including treble damages, costs of suit, and reasonable attorneys' fees arising from defendants' violations of Section 1 of the Sherman Act (15 U.S.C. § 1).

6. The Court has subject matter jurisdiction pursuant to Sections 4 and 16 of the Clayton Act (15 U.S.C. §§ 15 and 26) and 28 U.S.C. §§ 1331 and 1337.

7. Venue is proper in this judicial district pursuant to Section 12 of the Clayton Act (15 U.S.C. § 22) and 28 U.S.C. § 1391(b), (c), and (d) because a substantial part of the events giving rise to plaintiffs' claims occurred in this district, a substantial portion of the affected interstate trade and commerce was carried out in this district, and one or more of the defendants reside in this district.

8. Defendants are subject to the jurisdiction of this Court by virtue of their nationwide contacts and other activities, as well as their contacts with the State of California.

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### III. PARTIES

#### A. Plaintiffs

9. Plaintiff A.M. Photo & Imaging Center, Inc. is a Georgia corporation with its principal place of business in Atlanta, Georgia. During the Class Period, plaintiff purchased a TFT-LCD Product directly from one of the defendants and suffered injury as a result of defendants' unlawful conduct.

10. Plaintiff Andy Ciaccio, d/b/a Art's TV & Appliance, operates a retail business in North Haven, Connecticut. During the Class Period, plaintiff purchased TFT-LCD Products directly from one or more defendants and suffered injury as a result of defendants' unlawful conduct.

11. Plaintiff CMP Consulting Services, Inc. is a Florida corporation with its principal place of business in Miami, Florida. During the Class Period, plaintiff purchased TFT-LCD Products directly from one or more defendants and suffered injury as a result of defendants' unlawful conduct.

12. Plaintiff Crago, Inc., formerly known as Dash Computers, Inc., is a Kansas corporation with its principal place of business in Merriam, Kansas. During the Class Period, plaintiff purchased TFT-LCD Products directly from one or more defendants and suffered injury as a result of defendants' unlawful conduct.

13. Plaintiff Home Technologies Bellevue LLC is a Washington limited liability company with its principal place of business in Bellevue, Washington. During the Class Period, plaintiff purchased TFT-LCD Products directly from one or more of the defendants and suffered injury as a result of defendants' unlawful conduct.

14. Plaintiff Nathan Muchnick, Inc. was a Pennsylvania corporation that had its principal place of business in Philadelphia, Pennsylvania. During the Class Period, plaintiff purchased TFT-LCD Products directly from one or more defendants and suffered injury as a result of defendants' unlawful conduct.

15. Plaintiff Omnis Computer Supplies, Inc. is a New York corporation with its principal place of business in Schenectady, New York. During the Class Period, plaintiff

1 purchased TFT-LCD Products directly from one or more defendants and suffered injury as  
2 a result of defendants' unlawful conduct.

3 16. Plaintiff Orion Home Systems, LLC is a Minnesota limited liability  
4 corporation with its principal place of business in Eagen, Minnesota. During the Class  
5 Period, plaintiff purchased TFT-LCD Products directly from one or more defendants and  
6 suffered injury as a result of defendants' unlawful conduct.

7 17. Plaintiff Phelps Technologies, Inc. is a Missouri corporation with its  
8 principal place of business in Overland Park, Kansas. During the Class Period, plaintiff  
9 purchased TFT-LCD Products directly from one or more defendants and suffered injury as  
10 a result of defendants' unlawful conduct.

11 18. Plaintiff Royal Data Services, Inc. is a Hawaii corporation with its principal  
12 place of business in Honolulu, Hawaii. During the Class Period, plaintiff purchased TFT-  
13 LCD Products directly from one or more defendants and suffered injury as a result of  
14 defendants' unlawful conduct.

15 19. Plaintiff Univisions-Crimson Holding, Inc. is a New York corporation with  
16 its principal place of business in Syracuse, New York. During the Class Period, plaintiff  
17 purchased TFT-LCD Products directly from one or more defendants and suffered injury as  
18 a result of defendants' unlawful conduct.

19 20. Plaintiff Weber's World Company is a partnership that operates a retail store  
20 in Dana Point, California. During the Class Period, plaintiff purchased TFT-LCD Products  
21 directly from one or more defendants and suffered injury as a result of defendants'  
22 unlawful conduct.

## 23 **B. Defendants**

### 24 **1. AU Optronics**

25 21. Defendant AU Optronics Corporation is a Taiwanese company with its  
26 principal place of business at No. 1, Li-Hsin Road 2, Hsinchu Science Park, Hsinchu  
27 30078, Taiwan. AU Optronics Corporation was created in 2001 by the merger of Acer  
28 Display Technology, Inc. and Unipac, both of which were involved in the manufacture of

1 TFT-LCD Products. During the Class Period, AU Optronics Corporation manufactured,  
2 sold, and distributed TFT-LCD Products to customers throughout the United States.

3 22. Defendant AU Optronics Corporation America ("AU America") is a  
4 California corporation with its principal place of business at 9720 Cypresswood Drive,  
5 Suite 241, Houston, Texas. AU America was formerly known as Acer Display  
6 Technology America, Inc. AU America is a wholly-owned and controlled subsidiary of  
7 defendant AU Optronics Corporation. In 2006, Hsuan Bin Chen, the president and Chief  
8 Operating Officer of AU Optronics Corporation, was simultaneously the Chairman of AU  
9 America. During the Class Period, AU America sold and distributed TFT-LCD Products  
10 manufactured by AU Optronics to customers throughout the United States.

11 23. Defendants AU Optronics Corporation and AU America are collectively  
12 referred to herein as "AU Optronics."

## 13 2. Chi Mei

14 24. Defendant Chi Mei Corporation ("CMC") is a Taiwanese company with its  
15 principal place of business located at No. 59-1, San Chia, Jen Te, Tainan County, Taiwan  
16 71702. CMC is the parent company for all of the Chi Mei entities herein. During the  
17 Class Period, CMC manufactured, sold, and distributed TFT-LCD Products to customers  
18 throughout the United States.

19 25. Defendant Chi Mei Optoelectronics Corporation ("CMO") is a Taiwanese  
20 company with its principal place of business at No. 3, Sec. 1, Huanshi Road, Southern  
21 Taiwan Science Park, Sinshih Township, Tainan County, 74147 Taiwan. It is a subsidiary  
22 of CMC. CMO was formed in 1998, and has since become a major manufacturer of TFT-  
23 LCD Products. During the Class Period, CMO manufactured, sold, and distributed TFT-  
24 LCD Products to customers throughout the United States.

25 26. Defendant CMO Japan Co., Ltd. ("CMO Japan") is a Japanese company  
26 headquartered at Nansei-Yaesu Bldg. 4F, 2-2-10 Yaesu, Chuo-ku, Tokyo 104-0028, Japan.  
27 Up until 2006, CMO Japan was known as International Display Technology, Ltd. CMO  
28 Japan is a wholly-owned and controlled subsidiary of defendant CMO. CMO Japan has

1 been in the TFT-LCD business since 2001. During the Class Period, CMO Japan  
2 manufactured, sold, and distributed TFT-LCD Products throughout the United States.

3 27. Defendant Chi Mei Optoelectronics USA, Inc. ("CMO USA") is a Delaware  
4 corporation with its principal place of business at 101 Metro Drive, Suite 510, San Jose,  
5 California. Up until 2006, CMO USA was known as International Display Technology  
6 U.S.A., Inc. CMO USA is a wholly-owned and controlled subsidiary of defendant CMO  
7 Japan. During the Class Period, CMO USA sold and distributed TFT-LCD Products  
8 manufactured by CMO Japan to customers throughout the United States. The Chairman of  
9 CMO USA in 2006, Chen-Lung Kuo, was previously the Chairman of CMO Japan's  
10 predecessor, and in or about 2007 became Vice President in charge of sales and marketing  
11 for CMO. The President of CMO USA in 2006, Junichi Ishii, was previously the President  
12 of CMO Japan's predecessor.

13 28. Defendant Nexgen Mediatech, Inc. ("Nexgen") is a Taiwanese company with  
14 its principal place of business at 11F, No. 186, Jinayi Rd., Chung Ho City, Taipei Hsien,  
15 Taiwan. Nexgen is a wholly-owned and controlled subsidiary of CMC. During the Class  
16 Period, Nexgen sold and distributed TFT-LCD Products manufactured by CMO to  
17 customers throughout the United States.

18 29. Defendant Nexgen Mediatech USA, Inc. ("Nexgen USA") is a California  
19 corporation with its principal place of business at 14500 Proctor Avenue, City of Industry,  
20 California. Nexgen USA is a wholly-owned and controlled subsidiary of CMC. During  
21 the Class Period, Nexgen USA sold and distributed TFT-LCD Products manufactured by  
22 CMO to customers throughout the United States.

23 30. Defendants CMC, CMO, CMO Japan, CMO USA, Nexgen, and Nexgen  
24 USA are collectively referred to herein as "Chi Mei."

25 **3. Chunghwa**

26 31. Defendant Chunghwa Picture Tubes, Ltd. is a Taiwanese company with its  
27 principal place of business at 1127 Heping Road, Bade City, Taoyuan, Taiwan. It is a  
28 subsidiary of Tatung Company, a consolidated consumer electronics and information



1 technology company based in Taiwan. Chunghwa Picture Tubes, Ltd.'s Board of Directors  
2 includes representatives from Tatung Company. The Chairman of Chunghwa Picture  
3 Tubes, Ltd., Weishan Lin, is also the Chairman and General Manager of Tatung Company.  
4 During the Class Period, Chunghwa Picture Tubes, Ltd. manufactured, sold, and  
5 distributed TFT-LCD Products to customers throughout the United States.

6 32. Tatung Company of America, Inc. ("Tatung America") is a California  
7 corporation with its principal place of business at 2850 El Presidio Street, Long Beach,  
8 California. Tatung America is a wholly-owned and controlled subsidiary of Tatung  
9 Company. During the Class Period, Tatung America sold and distributed TFT-LCD  
10 Products manufactured by Chunghwa Picture Tubes, Ltd. to customers throughout the  
11 United States.

12 33. Defendants Chunghwa Picture Tubes, Ltd. and Tatung America are  
13 collectively referred to herein as "Chunghwa."

14 **4. Epson**

15 34. Defendant Epson Imaging Devices Corporation ("Epson Japan") is a  
16 Japanese company with its principal place of business at 4F Annex, World Trade Center  
17 Building, 2-4-1 Hamamatsu-cho, Minato-ku, Tokyo 105-6104 Japan. Up until December  
18 28, 2006, Epson Japan was known as Sanyo Epson Imaging Devices Corporation. During  
19 the Class Period, Epson Japan manufactured, sold, and distributed TFT-LCD Products to  
20 customers throughout the United States.

21 35. Defendant Epson Electronics America, Inc. ("Epson America") is a  
22 California corporation with its principal place of business at 2580 Orchard Parkway, San  
23 Jose, California. Epson America is a wholly-owned and controlled subsidiary of defendant  
24 Seiko Epson Corporation. During the Class Period, Epson America sold and distributed  
25 TFT-LCD Products manufactured by Epson Japan to customers throughout the United  
26 States.

27 36. Defendants Epson Japan and Epson America are collectively referred to  
28 herein as "Epson."



**5. HannStar**

37. Defendant HannStar Display Corporation ("HannStar") is a Taiwanese company with its principal place of business at No. 480, Rueiguang Road, 12th Floor, Neihu Chiu, Taipei 114, Taiwan. HannStar has been in the business of manufacturing and selling TFT-LCDs since 1998. During the Class Period, HannStar manufactured, sold, and distributed TFT-LCD Products to customers throughout the United States.

**6. Hitachi**

38. Defendant Hitachi, Ltd. is a Japanese company with its principal executive office at 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo, 100-8280, Japan. The company was one of the original producers of TFT-LCDs. In 2002, it spun off its TFT-LCD manufacturing assets to Hitachi Displays, Ltd., a wholly owned subsidiary. During the Class Period, Hitachi, Ltd. manufactured, sold, and distributed TFT-LCD Products to customers throughout the United States.

39. Defendant Hitachi Displays, Ltd. is a Japanese company with its principal place of business at AKS Bldg. 5F, 6-2 Kanda Neribeicho 3, Chiyoda-ku, Tokyo, 101-0022, Japan. Hitachi Displays, Ltd. was formed in 2002 and acquired all of defendant Hitachi, Ltd.'s TFT-LCD manufacturing business. Hitachi Displays, Ltd. is a wholly-owned and controlled subsidiary of Hitachi, Ltd. During the Class Period, Hitachi Displays, Ltd. manufactured, sold, and distributed TFT-LCD Products to customers throughout the United States. Hitachi Displays, Ltd. is a member of the joint venture IPS Alpha Technology.

40. Defendant Hitachi Electronic Devices (USA), Inc. is a Delaware corporation with its principal place of business at 575 Mauldin Road, Greenville, South Carolina. Its ultimate parent company is Hitachi, Ltd. During the Class Period, Hitachi Electronic Devices (USA), Inc. sold and distributed TFT-LCD Products manufactured by Hitachi, Ltd. and Hitachi Displays, Ltd. to customers throughout the United States.

41. Defendants Hitachi, Ltd., Hitachi Displays, Ltd., and Hitachi Electronic Devices (USA), Inc. are referred to collectively herein as "Hitachi."

**7. LG Electronics**

42. Defendant LG Electronics, Inc. is a Korean company headquartered at LG Twin Towers 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, Korea 150-721. The company first began mass production of TFT-LCD panels in September 1995. Since then, LG Electronics, Inc. has held, and continues to hold, ownership interests in entities that participate in the TFT-LCD industry, including a joint venture with defendant Koninklijke Philips Electronics N.V. called LG.Philips LCD Co., Ltd. The Chief Financial Officer for LG Electronics, Inc. in 2006, Young Soo Kwon, was the Co-President and Chief Executive Office for LG.Philips LCD Co., Ltd. in 2007. LG Electronics, Inc.'s TFT-LCD division operates through LG.Philips Co., Ltd. During the Class Period, LG Electronics, Inc. manufactured, sold, and distributed TFT-LCD Products to customers throughout the United States.

43. Defendant LG Electronics USA, Inc. ("LG USA") is a Delaware corporation with its principal place of business at 1000 Sylvan Avenue, Englewood Cliffs, New Jersey. LG USA is a wholly-owned and controlled subsidiary of LG Electronics, Inc. In 2003, the Director of Sales for LG Electronics USA, Inc., Sonny Marak, became the Vice President of Sales for LG Electronics, Inc. In 2007, the Vice President of Sales of Home Appliances for LG Electronics, Inc., John Herrington, was also the President of the Appliance Division for LG Electronics USA, Inc. During the Class Period, LG USA sold and distributed TFT-LCD Products manufactured by defendants LG Electronics, Inc. and LG.Philips LCD Co., Ltd. to customers throughout the United States.

44. Defendants LG Electronics, Inc. and LG USA are referred to collectively herein as "LG Electronics."

**8. NEC**

45. Defendant NEC LCD Technologies, Ltd. is a Japanese company with its principal place of business at 1753 Shimonumabe, Nakahara-Ku, Kawasaki, Kanagawa, 211-8666, Japan. It has been in the TFT-LCD business since 1993. During the Class Period, NEC LCD Technologies, Ltd. manufactured, sold, and distributed TFT-LCD

1 Products to customers throughout the United States.

2 46. Defendant NEC Electronics America, Inc. is a California corporation with its  
3 principal place of business at 2880 Scott Boulevard, Santa Clara, California. During the  
4 Class Period, NEC Electronics America, Inc. sold and distributed TFT-LCD Products  
5 manufactured by NEC LCD Technologies, Ltd. to customers throughout the United States.

6 47. Defendants NEC LCD Technologies, Ltd. and NEC Electronics America,  
7 Inc. are referred to collectively herein as "NEC."

8 **9. Philips**

9 48. Defendant Koninklijke Philips Electronics N.V. ("Philips"), which translates  
10 to Royal Philips Electronics, is a Dutch entity located at Breitner Center, Amstelplein 2,  
11 1096 BC Amsterdam, The Netherlands. In July 1999, Philips entered into a joint venture  
12 with defendant LG Electronics creating defendant LG.Philips LCD Co., Ltd. During the  
13 Class Period, Philips manufactured, sold, and distributed TFT-LCD Products through its  
14 joint venture to customers throughout the United States.

15 **10. Samsung**

16 49. Defendant Samsung Electronics Co., Ltd. is a Korean company with its  
17 principal place of business at Samsung Main Building, 250, Taepyeongno 2-ga, Jung-gu,  
18 Seoul 100-742, Korea. It is the world's largest TFT-LCD producer. During the Class  
19 Period, it manufactured, sold, and distributed TFT-LCD Products to customers throughout  
20 the United States.

21 50. Defendant Samsung Electronics America, Inc. ("Samsung America") is a  
22 New York corporation with its principal place of business at 105 Challenger Road,  
23 Ridgefield Park, New Jersey. Samsung America is a wholly-owned and controlled  
24 subsidiary of defendant Samsung Electronics Company, Ltd. During the Class Period,  
25 Samsung America sold and distributed TFT-LCD Products manufactured by Samsung  
26 Electronics Company, Ltd. to customers throughout the United States.

27 51. Samsung Semiconductor, Inc. is a California corporation with its principal  
28 place of business at 3655 N. First Street, San Jose, California. Samsung Semiconductor,

1 Inc. is a wholly-owned and controlled subsidiary of defendant Samsung Electronics  
 2 Company, Ltd. During the Class Period, Samsung Semiconductor, Inc. sold and  
 3 distributed TFT-LCD Products manufactured by Samsung Electronics Company, Ltd.  
 4 throughout the United States.

5 52. Defendants Samsung Electronics Company, Ltd., Samsung America, and  
 6 Samsung Semiconductor, Inc. are referred to collectively herein as "Samsung."

7 **11. Sharp**

8 53. Defendant Sharp Corporation is a Japanese company with its principal place  
 9 of business at 22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan. The company was  
 10 one of the earliest producers of TFT-LCDs. During the Class Period, Sharp Corporation  
 11 manufactured, sold, and distributed TFT-LCD Products to customers throughout the  
 12 United States.

13 54. Defendant Sharp Electronics Corporation is a New York corporation with its  
 14 principal place of business at Sharp Plaza, Mahwah, New Jersey. Sharp Electronics  
 15 Corporation is a wholly-owned and controlled subsidiary of defendant Sharp Corporation.  
 16 During the Class Period, Sharp Electronics Corporation sold and distributed TFT-LCD  
 17 Products manufactured by defendant Sharp Corporation to customers throughout the  
 18 United States.

19 55. Defendants Sharp Corporation and Sharp Electronics Corporation are  
 20 referred to collectively herein as "Sharp."

21 **12. Toshiba**

22 56. Defendant Toshiba Corporation is a Japanese company with its principal  
 23 place of business at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan. Toshiba  
 24 has two joint ventures that manufacture, sell, and distribute TFT-LCD Products – Toshiba  
 25 Matsushita Display Technology Co., Ltd. and IPS Alpha Technology, Ltd. During the  
 26 Class Period, Toshiba manufactured, sold, and distributed TFT-LCD Products to  
 27 customers throughout the United States.

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1           57. Defendant Toshiba America Electronics Components, Inc. is a California  
 2 corporation with its principal place of business at 19900 MacArthur Boulevard, Suite 400,  
 3 Irvine, California. Toshiba America Electronics Components, Inc. is a wholly-owned and  
 4 controlled subsidiary of Toshiba America, Inc. Toshiba America Electronics Components,  
 5 Inc. is the United States sales and marketing representative for defendant Toshiba  
 6 Matsushita Display Technology Co., Ltd. During the Class Period, Toshiba America  
 7 Electronics Components, Inc. sold and distributed TFT-LCD Products manufactured by  
 8 Toshiba Corporation to customers throughout the United States.

9           58. Defendant Toshiba America Information Systems, Inc. is a California  
 10 corporation with its principal place of business at 9470 Irvine Blvd., Irvine, California.  
 11 Toshiba America Information Systems, Inc. is a wholly-owned and controlled subsidiary  
 12 of Toshiba America, Inc., a holding company for defendant Toshiba Corporation. During  
 13 the Class Period, Toshiba America Information Systems, Inc. sold and distributed TFT-  
 14 LCD Products manufactured by Toshiba Corporation to customers throughout the United  
 15 States.

16           59. Defendants Toshiba Corporation, Toshiba America Electronics Components,  
 17 Inc., and Toshiba America Information Systems, Inc. are referred to collectively herein as  
 18 "Toshiba."

### 19           **13. Joint Ventures**

20           60. Defendant IPS Alpha Technology, Ltd. ("IPS Alpha") is a Japanese entity  
 21 with its principal place of business at 3732 Hayano, Mobara-shi, Chiba 297-0037, Japan.  
 22 IPS Alpha was formed in January 2005 as a joint venture between defendants Hitachi  
 23 Displays, Ltd., Toshiba Corporation, and Matsushita Electric Industrial Co., Ltd. to  
 24 manufacture and sell TFT-LCD panels for televisions. During the Class Period, IPS Alpha  
 25 manufactured, sold, and distributed TFT-LCD Products to customers throughout the  
 26 United States.

27           61. Defendant LG.Philips LCD Co., Ltd. is a Korean entity with its principal  
 28 place of business at 17th Floor, West Tower, LG Twin Towers 20, Yeouido-dong,

1 Yeongdeungpo-gu, Seoul, Korea 150-721. LG.Philips LCD Co., Ltd. was created in July  
2 1999 as a joint venture between defendant LG Electronics and defendant Philips. In July  
3 2004, LG.Philips LCD Co., Ltd. became a public company, with LG Electronics and  
4 Philips as the controlling shareholders. LG.Philips LCD Co., Ltd. describes itself as "the  
5 global leader in the development and manufacture of TFT-LCD panels for televisions,  
6 computer monitors, notebooks and emerging mobile applications." During the Class  
7 Period, LG.Philips LCD Co., Ltd. manufactured, sold, and distributed TFT-LCD Products  
8 to customers throughout the United States.

9 62. Defendant LG.Philips LCD America, Inc. is a California corporation with its  
10 principal place of business at 150 East Brokaw Road, San Jose, California. LG.Philips  
11 LCD America, Inc. is a wholly-owned and controlled subsidiary of LG.Philips LCD Co.,  
12 Ltd. During the Class Period, LG.Philips LCD America, Inc. sold and distributed TFT-  
13 LCD Products manufactured by LG.Philips LCD Co., Ltd. to customers throughout the  
14 United States.

15 63. Defendants LG.Philips LCD Co., Ltd. and LG.Philips LCD America, Inc. are  
16 referred to collectively herein as "LG.Philips."

17 64. Defendant Toshiba Matsushita Display Technology Co., Ltd. ("Toshiba  
18 Matsushita") is a Japanese company with its principal place of business at Rivage  
19 Shinagawa, 1-8, Konan c4-chome, Minato-ku, Tokyo 108-0075, Japan. Toshiba  
20 Matsushita is a joint venture between defendant Toshiba Corporation and defendant  
21 Matsushita Electric Industrial Co., Ltd. created for the purpose of manufacturing LCD  
22 devices. During the Class Period, Toshiba Matsushita manufactured, sold, and distributed  
23 TFT-LCD Products to customers throughout the United States.

#### 24 IV. AGENTS AND CO-CONSPIRATORS

25 65. The acts alleged against the defendants in this Complaint were authorized,  
26 ordered, or done by their officers, agents, employees, or representatives, while actively  
27 engaged in the management and operation of defendants' businesses or affairs.

28 / / /

66. Various persons and/or firms not named as defendants herein may have participated as co-conspirators in the violations alleged herein and may have performed acts and made statements in furtherance thereof.

67. Each defendant acted as the principal, agent, or joint venturer of, or for, other defendants with respect to the acts, violations, and common course of conduct alleged by plaintiffs.

## V. CLASS ACTION ALLEGATIONS

68. Plaintiffs bring this action on behalf of themselves and all others similarly situated (the "Class") pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2), and 23(b)(3). The Class is defined as follows:

All persons and entities who, between January 1, 1996 and December 11, 2006, directly purchased a TFT-LCD Product in the United States from any defendant or any subsidiary or affiliate thereof, or any co-conspirator. Excluded from the Class are defendants, their parent companies, subsidiaries and affiliates, any co-conspirators, all governmental entities, and any judges or justices assigned to hear any aspect of this action.

69. The Class definition encompasses those who bought a TFT-LCD Product directly from a defendant, even if the TFT-LCD panel contained therein was manufactured by an affiliated entity, principal, agent, or co-conspirator.

70. Plaintiffs do not know the exact size of the Class because such information is in the exclusive control of the defendants. Due to the nature of the trade and commerce involved, however, plaintiffs believe that the Class members are numerous and geographically dispersed throughout the United States, rendering joinder of all Class members impracticable.

71. The questions of law or fact common to the Class include but are not limited to:

- a. Whether defendants engaged in a contract, combination, and/or conspiracy to fix, raise, maintain, or stabilize prices of TFT-LCD Products sold in the United States;

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- b. Whether defendants engaged in a contract, combination, and/or conspiracy to restrict output of TFT-LCD Products sold in the United States;
- c. Whether defendants' conduct caused the prices of TFT-LCD Products sold in the United States to be at artificially high and noncompetitive levels;
- d. Whether plaintiffs and the other members of the Class were injured by defendants' conduct, and, if so, the appropriate class-wide measure of damages for Class members; and
- e. Whether plaintiffs and the Class are entitled to, among other things, injunctive relief, and if so, the nature and extent of such injunctive relief.

72. These and other questions of law and fact are common to the Class, and predominate over any questions affecting only individual Class members.

73. Plaintiffs' claims are typical of the claims of the Class because plaintiffs directly purchased TFT-LCD Products from one or more of the defendants.

74. Plaintiffs will fairly and adequately represent the interests of the Class in that plaintiffs are direct purchasers of TFT-LCD Products and have no conflict with any other members of the Class. Furthermore, plaintiffs have retained competent counsel experienced in antitrust, class action, and other complex litigation.

75. Defendants have acted on grounds generally applicable to the Class, thereby making final injunctive relief appropriate with respect to the Class as a whole.

76. This class action is superior to the alternatives, if any, for the fair and efficient adjudication of this controversy. Prosecution as a class action will eliminate the possibility of repetitive litigation. There will be no material difficulty in the management of this action as a class action.

77. The prosecution of separate actions by individual Class members would create the risk of inconsistent or varying adjudications, establishing incompatible standards

1 of conduct for defendants.

## 2 **VI. TRADE AND COMMERCE**

3 78. During the Class Period, each defendant, or one or more of its subsidiaries,  
4 sold TFT-LCD Products in the United States in a continuous and uninterrupted flow of  
5 interstate commerce and foreign commerce, including through and into this judicial  
6 district.

7 79. During the Class Period, defendants collectively controlled a vast majority of  
8 the market for TFT-LCD Products, both globally and in the United States.

9 80. The business activities of the defendants substantially affected interstate  
10 trade and commerce in the United States and caused antitrust injury in the United States.

## 11 **VII. FACTUAL ALLEGATIONS**

### 12 **A. TFT-LCD Technology**

13 81. The technology behind TFT-LCDs is not new. In the 1950s and 1960s, RCA  
14 Corp. researched whether liquid crystals could be the basis for a new, lightweight, low-  
15 power display technology. In the 1970s, after RCA Corp. discontinued its efforts,  
16 Japanese companies took the lead in commercializing liquid crystal technology. These  
17 efforts resulted in monochrome calculators and watches. By the early 1990s, liquid crystal  
18 technology was introduced in notebook computers and small, low-resolution televisions.  
19 In the mid-1990s, the technology advanced further with the development of TFT-LCDs.

20 82. As noted above, the basic structure of a TFT-LCD panel is two glass  
21 substrates sandwiching a layer of liquid crystal compound. Liquid crystals change  
22 orientation under an applied electric field and can thereby block or pass light. One glass  
23 substrate has thin chemical films that act as transistors, and the other glass substrate is  
24 coated with liquid pigments that act as color filters. When voltage is applied to the  
25 transistors, the liquid crystal bends, causing light to pass through the filters to create red,  
26 green, or blue pixels. Pixels are the smallest unit in a picture image, and the density of  
27 pixels in a display determines the resolution.

28 ///

1           83.     The term "active matrix" describes the ability to switch individually each  
2 pixel in a display. Unlike older LCDs that have one transistor for each row and column of  
3 pixels, TFT-LCDs have a transistor for each pixel. Thus, the term "active matrix LCD" is  
4 sometimes used interchangeably with TFT-LCD. Active matrix displays are brighter and  
5 sharper than passive matrix displays of the same size.

6           84.     The glass substrates used for TFT-LCD panels begin with a "motherglass," a  
7 sheet of glass that is cut to make multiple panels. TFT-LCDs are manufactured in fabs that  
8 are equipped to handle a particular size motherglass. Technological innovations over time  
9 have allowed manufacturers to begin the manufacturing process with larger and larger size  
10 motherglass sheets. This, in turn, has resulted in the ability to fabricate larger and/or more  
11 TFT-LCD panels. Each increase in motherglass size is described as a generation. Third  
12 generation fabs in the 1998 to 1999 period typically utilized 550 millimeter ("mm") by 650  
13 mm motherglass, while some current (eighth generation) fabs utilize 2160 mm by 2460  
14 mm motherglass. The use of larger motherglass provides substantial cost savings to  
15 manufacturers.

16           85.     TFT-LCDs are capable of producing the same image as cathode ray tubes  
17 ("CRTs"), but in a much smaller package. TFT-LCDs also have lower energy  
18 requirements, are generally easier to read, and do not flicker like CRTs. TFT-LCD panels  
19 of less than 10 inches in diagonal are considered "small" or "medium" displays. They are  
20 also referred to as "mobile displays." These displays are commonly used in cell phones,  
21 personal digital assistants, and cameras.

22           86.     TFT-LCDs of 10 inches in diagonal and larger are considered "large-area  
23 displays." Large-area displays are most commonly used for desktop computer monitors,  
24 notebook computers, and televisions. The core products during most of the Class Period  
25 were displays for notebook computers and computer monitors. During much of the Class  
26 Period, 14-inch and 15-inch notebook computers and 15-inch to 17-inch computer  
27 monitors were the most popular TFT-LCD Products, representing as much as 80 percent of  
28 all TFT-LCDs produced for notebook computers or computer monitors.

**1 B. Structure of the TFT-LCD Industry**

2 87. The TFT-LCD industry has several characteristics that facilitated a  
3 conspiracy, including market concentration, ease of information sharing, the consolidation  
4 of manufacturers, multiple interrelated business relationships, significant barriers to entry,  
5 heightened price sensitivity to supply and demand forces, and homogeneity of products.

**6 1. Market Concentration**

7 88. The market for TFT-LCD Products is very large. A September 28, 2006  
8 *Reuters* article reported that "[m]anufacturers are expected to pump out 48.4 million LCDs  
9 for TVs this year alone, up 70 percent over 2005, while flat-panel sales – most of those  
10 using LCD technology – are expected to reach \$US 88 billion this year and \$US 100  
11 billion in 2007."

12 89. Despite its enormous size, the market for TFT-LCD Products industry is  
13 highly concentrated, a factor that is conducive to the type of collusive activity alleged by  
14 plaintiffs. In 2005, the top five suppliers – Samsung, LG.Philips, Sharp, AU Optronics,  
15 and Chi Mei – collectively shipped 90 percent of all TFT-LCD panels for television use.  
16 According to estimates in late 2006 from industry analyst iSuppli Corporation ("iSuppli"),  
17 LG.Philips had the greatest share of LCD television shipments in the first quarter of 2006  
18 (22.3%), followed by Samsung (20%), Chi Mei (18.7%), AU Optronics (16.8%), and  
19 Sharp (13.9%). These companies were the five largest producers as measured by market  
20 share during much of the Class Period.

**21 2. Information Sharing**

22 90. Because of common membership in trade associations, interrelated business  
23 arrangements such as joint ventures, allegiances between companies in certain countries,  
24 and relationships between the executives of certain companies, there were many  
25 opportunities for defendants collusively to discuss competitive information. The ease of  
26 communication was facilitated by the use of meetings, telephone conversations, email  
27 messages, and text messaging. Defendants took advantage of these opportunities to  
28 discuss, and agree upon, their pricing for TFT-LCD Products.

91. Additionally, the TFT-LCD industry is analyzed by several market research firms. Each of these firms offers, for a fee, monthly market data on pricing, supply, utilization of fabs, and other key indicators of market activity. The capacity and pricing data reported by these firms comes directly from manufacturers. Manufacturers typically report historical, current, and perhaps most importantly, prospective information. Thus, defendants had access to each other's future plans for bringing capacity on line, capacity utilization, market share, pricing, and the advent of new technology. Because there were very few companies that needed to be analyzed in order to obtain this data, all competitors in the TFT-LCD market had ready and timely access to reliable information about their competition's pricing as well as future supply and capacity decisions. By monitoring and analyzing this information over time, participants in the conspiracy were able to signal their respective intent, verify that the conspiracy was working, and identify any parties who might be deviating from the conspiracy.

### 3. Consolidation

92. The TFT-LCD Products industry experienced significant consolidation during the Class Period, including: (a) the creation of AU Optronics in 2001 through the merger of Acer Display and Unipac Electronics; (b) the creation of Toshiba Matsushita in 2002; (c) Fujitsu, Ltd.'s transfer of its LCD business to Sharp in 2005; (d) the formation of IPS Alpha in 2005 by Hitachi, Mitsubishi, and Toshiba; and (e) AU Optronics' acquisition in 2006 of Quanta Display, which resulted in AU Optronics becoming the third-largest manufacturer of TFT-LCD Products.

### 4. Multiple Interrelated Business Relationships

93. The industry is marked by a web of cross-licensing agreements, joint ventures, and other cooperative arrangements that can facilitate collusion. AU Optronics, for example, entered into licensing arrangements with Sharp in 2005 and Samsung in 2006. Chunghwa did likewise with Sharp in December of 2006. Chi Mei has licensing arrangements with Sharp, AU Optronics, Chunghwa, HannStar and Hitachi. A diagram illustrating these various licensing arrangements is attached hereto as Exhibit A.

1           94.     The industry has a close-knit nature whereby multiple business relationships  
2 between supposed competitors blur the lines of competition and provided ample  
3 opportunity to collude. These business relationships also created a unity of interest  
4 amongst competitors so that the conspiracy was easier to implement and enforce than if  
5 such interrelationships did not exist. Exhibit A illustrates these relationships.

6           **5.     High Costs of Entry Into the Industry**

7           95.     There are significant manufacturing and technological barriers to entry into  
8 the TFT-LCD Products industry. Efficient fabrication plants are large and costly. TFT-  
9 LCD Products are also subject to technological advances, so that firms within the industry  
10 must undertake significant research and development expenses. DisplaySearch, a research  
11 firm in Austin, Texas that covers the TFT-LCD industry, reported in September 2005 that  
12 the top TFT-LCD manufacturers collectively spend \$30 million a day on property, plant,  
13 and equipment. A January 2006 DisplaySearch report noted that a typical seventh  
14 generation fab can cost more than \$3 billion.

15          96.     During the Class Period, the costs of the assembly components, both as a  
16 whole and individually, have been generally declining, and, in some periods, declining at a  
17 substantial rate. Later in the conspiracy, approximately 70 percent of the cost of TFT-LCD  
18 panel production was attributable to the cost of raw materials. Because the bulk of the  
19 costs borne by TFT-LCD manufacturers are variable and assembly-related, there were  
20 cost-driven incentives to reduce production. The fact that variable costs are such a high  
21 percentage of the production costs may allow a cartel artificially to boost prices with  
22 greater success than where fixed costs are the largest component of production costs. The  
23 combination of price discussions and manipulation of the output of TFT-LCD Products  
24 allowed defendants to keep prices above where they would have been but for the  
25 conspiracy.

26          **6.     The "Crystal Cycle"**

27          97.     Like all markets, the TFT-LCD industry is subject to business cycles of  
28 supply and demand. In the TFT-LCD industry, this cycle is known as the "crystal cycle."

1 This cycle has been described as "boom and bust" periods caused by alternating periods of  
2 oversupply and shortages, which create downward and upward pressures on prices for  
3 TFT-LCD Products. One fact that can affect such oversupply is the perceived demand for  
4 such products and whether manufacturers have adequately predicted such demand in  
5 determining how much capacity to build and how many TFT-LCD Products to produce.

6 98. Another factor is the entry of new competitors. Typically, when a new  
7 competitor enters a market, it floods the market with supply, and prices drop until an  
8 equilibrium is reached. In the TFT-LCD industry, however, defendants conspired to rein  
9 in and discipline these new entrants until the new entrants were assimilated into the  
10 conspiracy. This had the effect of tempering price drops and preventing them from  
11 reaching a competitive equilibrium.

12 99. The conspiracy did not completely eliminate the effects of the crystal cycle  
13 in the TFT-LCD industry. There were periods when defendants' collusive practices drove  
14 prices for TFT-LCD Products so high that demand began to fall to the point that  
15 defendants lowered prices for short periods of time. However, defendants' efforts to  
16 stabilize prices were effective in moderating the effects of the crystal cycle, including the  
17 impact on prices to direct purchasers. To the extent that prices for TFT-LCD Products fell,  
18 they fell from levels that had been set conspiratorially, rather than from levels set by free  
19 and open competition. Additionally, prices did not fall as low as they would have absent  
20 the conspiratorial conduct.

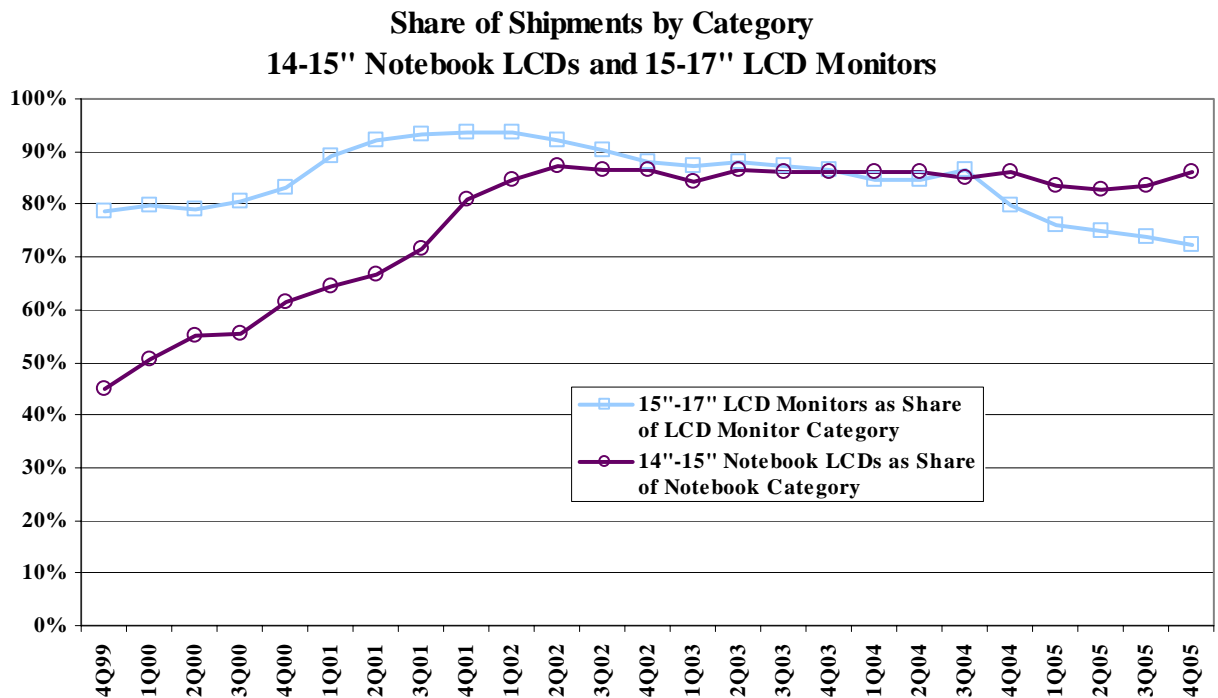
## 21 7. Dominant Products

22 100. Notwithstanding that there may be different applications for TFT-LCDs,  
23 there is a consistent and homogeneous way for defendants to monitor, analyze, discipline,  
24 and enforce their conspiracy. This can be done by looking at the predominant, or most  
25 popular, size panels and the applications for those panels that represent the highest  
26 percentage of sales. This can also be accomplished by looking at standardized statistics  
27 used in the industry, such as amount of glass produced and revenues per metric ton of  
28 glass. By using these, and other industry analytics, defendants could monitor, analyze,



discipline, and enforce their conspiracy.

101. For example, from the fourth quarter of 1999 through mid-2003, half or more of the TFT-LCD monitor shipments were 15-inch monitors. From mid-2003 to early 2006, 17-inch monitors were the predominant size. As for TFT-LCD televisions, from the fourth quarter of 1999 through the fourth quarter of 2000, shipments were predominantly of 10-inch to 14-inch models. During 2001 and much of 2002, sales of 13-inch to 15-inch models dominated. And in 2004 and 2005, the majority of shipments were of 20-inch and 32-inch models. The following chart shows the popularity of 14-inch to 15-inch notebook and 15-inch to 17-inch computer monitors.



### C. Pre-Conspiracy Market

102. Until the mid-1990s, Japanese companies like Hitachi and Sharp were essentially the exclusive suppliers of TFT-LCD panels.

103. In early 1995, the industry faced declining TFT-LCD panel prices, which industry analysts attributed to advances in technology and improving efficiencies. One analyst in this period noted that the "flat panel display industry is following the classic cyclical business pattern of the semiconductor industry." The Japanese manufacturers

1 realized that the capacity growth from investing in new plants was weakening the price of  
2 TFT-LCDs, and they slowed the rate of their investments. This, however, provided an  
3 opening to Korean manufacturers.

4 104. In 1995, three Korean companies – Samsung, LG Electronics, and, to a lesser  
5 extent, Hyundai Electronics Industries Co. ("Hyundai") – entered the market. These  
6 Korean firms offered comparable products at reduced prices in an effort to quickly gain  
7 market share. This resulted in increased competition in 1995, which contributed to the  
8 significant price declines seen during that timeframe.

9 105. Increases in manufacturing capacity and decreases in manufacturing costs  
10 seemed to assure continuing price declines. By mid-1995, the Japanese companies and the  
11 new Korean competitors had a total capacity to supply 14 million TFT-LCD screens, while  
12 demand for them was only about three million. In addition to the surges in capacity during  
13 1995, "[costs] were also dropping as production volume increases and manufacturing  
14 methods improved."

15 106. By late 1995, the effect of the entry by Korean suppliers had pushed down  
16 the price of some TFT-LCD panels by 50 percent from the previous year. The origin of  
17 the TFT-LCD conspiracy is traceable to this trough in prices.

#### 18 **D. Defendants' Collusive Pricing and Supply Restriction Practices**

19 107. After initial introduction into a market, consumer electronics products and  
20 their component parts are typically characterized by downward pricing trends. However,  
21 since at least 1996, the TFT-LCD Product market has been characterized by unnatural and  
22 sustained price stability, as well as certain periods of substantial increases in prices.  
23 Defendants achieved price stability and price increases by agreeing to fix and maintain  
24 prices and to restrict supply through decreases in capacity utilization.

25 108. Defendants controlled prices by manipulating the capacity of various  
26 generations of fabs as well as the timing of bringing new capacity on line. The percentage  
27 of a fab's capacity that is being used, sometimes called "fab loading," is maintained by  
28 various reporting companies and available to defendants. Thus, in addition to direct

1 discussions, defendants had more than adequate industry data on capacity utilization from  
2 which to implement and monitor the conspiracy.

3 **1. 1996**

4 109. By early 1996, analysts were lamenting the excess supply and drastic price  
5 cuts in the TFT-LCD markets. The downward pressure on prices, which had already fallen  
6 40 to 50 percent in 1995, was projected to continue due to lower manufacturing costs.  
7 Despite this, TFT-LCD Product prices actually rose in 1996, allegedly due to insufficient  
8 production capacity. In reality, defendants were fixing the prices.

9 110. During this period, the Japanese defendants herein began to partner with  
10 Taiwanese companies to trade technology and collaborate on supply. Japanese engineers  
11 were lent to Taiwanese firms, and Taiwanese output was shipped to Japan. This mutually  
12 beneficial relationship between purported competitors continued into at least 1999.

13 111. A few months into 1996, there was a reversal in the downward trend in TFT-  
14 LCD Product prices and an alleged inability of manufacturers to supply enough TFT-LCD  
15 panels to meet demand. By May of 1996, an industry magazine was reporting that, "[f]lat-  
16 panel-display purchasers are riding a roller coaster of pricing in the display market, with  
17 no clear predictability anytime soon . . . . Perplexed purchasers trying to keep up with the  
18 gyrating market can take solace that even vendors are constantly being surprised by the  
19 sudden twists and turns."

20 112. By mid-1996, industry analysts were commenting on an unusual rise in TFT-  
21 LCD panel prices that was noted to be "quite rare in the electronics industry."

22 113. 1996 also brought the advent of third generation fabs. In order to stay  
23 current with technology, manufacturers were moving quickly into third generation  
24 motherglass. LG Electronics was scheduled to have its third generation fab online by  
25 1997, and Hyundai was scheduled to do so by early 1998. However, manufacturers falsely  
26 claimed to be operating at full capacity and unable to meet demand, despite the millions of  
27 units of over-capacity that had supposedly existed months earlier. This resulted in surging  
28 prices. These price increases were also inconsistent with the fact that production had

1 become more efficient and cost effective.

2           **2.       1997 – 1998**

3           114. By 1997, Japanese manufacturers were steadily sending engineers to Taiwan  
4 to provide the Taiwanese manufacturers with the most up-to-date technology. In return,  
5 the Japanese received output from Taiwanese plants. In 1998, Chi Mei entered into such a  
6 strategic alliance with Fujitsu, a Japanese manufacturer that was acquired by Sharp in  
7 2005. These arrangements between Japanese and Taiwanese companies resulted in  
8 cooperative discussions between supposed competitors. It was also expected to contribute  
9 to an increase in supply of TFT-LCD panels.

10          115. By 1998, the TFT-LCD industry was not running near capacity, due in part  
11 to the still recent entry of the Korean companies. A March 30, 1998 article in *Electronic*  
12 *News* reported that Hyundai's production lines were running at only 20 to 50 percent. The  
13 article quoted Rob Harrison, director of marketing for Hyundai's display division, as  
14 saying, "There is plenty of inventory and capacity available to suit any shortage . . . You  
15 have to get your production up to full capacity again before you can even talk about there  
16 being a shortage and I think there are plenty of under-capacity fabs right now to bear the  
17 burden."

18          116. During this period, Samsung made a concerted effort to get other  
19 manufacturers in the industry to limit production. Yoon-Woo Lee, President and CEO of  
20 the Semiconductor Division of Samsung Electronics Co., Ltd. gave the keynote address at  
21 the Eighteenth International Display Research Conference (known as Asia Display 98).  
22 Mr. Lee said:

23           In order to maintain the tradition of top CRT manufacturer, we need to  
24 capture the high end market [and] deviate from the volume production of  
CRTs and LCDs.

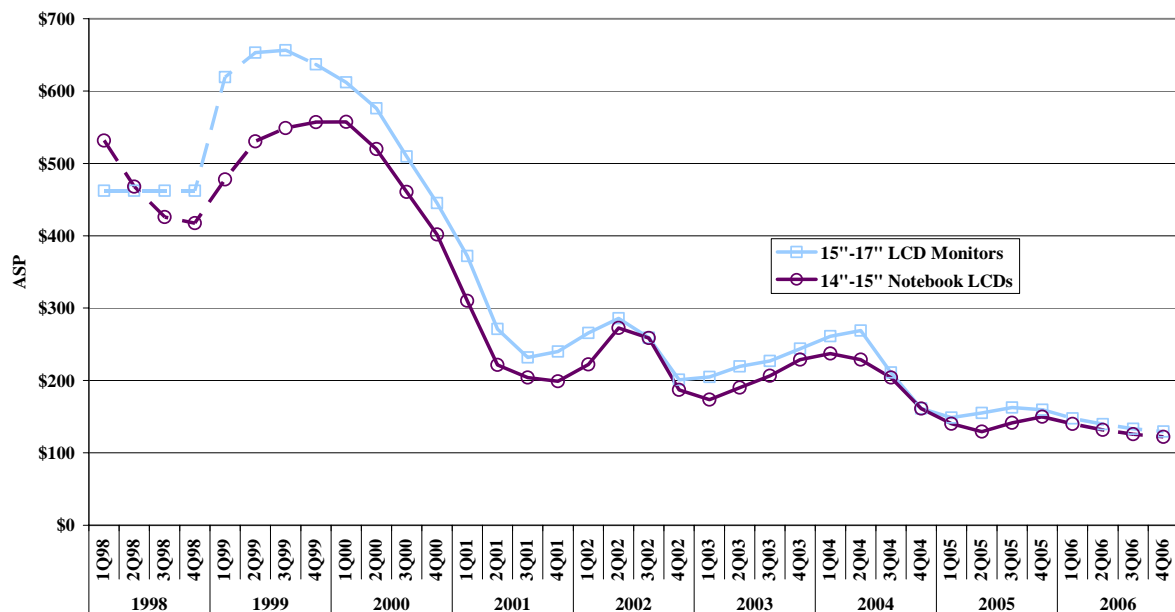
25           Taiwan is trying to enter TFT-LCD business because it has the advantage  
26 of the large PC production. To survive in this rapidly changing  
27 environment, we have to revise our previous strategies and redirect our  
28 business plans. It is time for fundamental shift for future decisions, time  
for transformation from volume driven to cost driven, time for driving  
value added strategies.

*If we prepare now by shifting from the traditional business approach, to value added new approach, we may be able to deviate from repeating the 'crystal cycle' again.*

[Emphasis added.]

117. Consistent with Samsung's effort to limit production, capacity restraints and the price-fixing agreement caused decreases in prices of TFT-LCD Products to slow and stop in late 1998. The chart below depicts the short-lived price fall in 1998 caused by the entry of Korean competitors, as well as the rise and eventual stabilization of prices in the first quarter of 2000, as the new entrants joined the conspiracy.

**Average Selling Price of High-Volume LCD Monitors and Notebook LCDs**



Source: DisplaySearch.

### 3. 1999

118. The efforts commenced by Samsung in 1998 continued to bear fruit. In 1999, TFT-LCD Product prices surged during that year due to a claimed "massive undersupply." This was despite the entry of Taiwanese manufacturers and several new fabs coming online.

///

119. At the beginning of 1999, industry publications suggested that the Japanese and Korean manufacturers were going to have the opportunity to recoup previous years' losses: "The AM-LCD imbalance has triggered cash-strapped Japanese and Korean vendors to up their tags in an effort to wash away the stain left by years of red ink . . . ."

120. By mid-1999, a Korean source was reporting: "[w]ith the supply shortage for TFT-LCD panels unlikely to be corrected in the near future, the domestic LCD industry is gleefully increasing its sales targets amid a sharp price rise." The lack of supply and attendant price increases were pretextual reports to the market.

121. Significantly, executives from both LG.Philips and Samsung announced in the same trade publication that they would raise prices and restrict production in 1999. The statements by Boch Kwon, Vice-President of LG.Philips's Sales Division, and Yoon-Woo Lee, President and CEO of Samsung's Semiconductor Division, were juxtaposed as follows:

LG LCD will raise prices across its entire TFT-LCD portfolio by 30 to 40 percent this year, Kwon said, although he expects that prices will stabilize some time in the second half. According to Samsung, demand for larger panels is reducing capacity because each display is eating up more square inches per motherglass substrate. This, combined with a stagnation in capital spending by many panel makers, will keep the LCD industry in a period of relative shortage until 2001, Lee said. The shortage has become acute, and has created an unusual market in which prices could rise as much as 30% to 80% in one year according to Ross Young, President of DisplaySearch, a research firm in Austin, Texas.

122. Also in 1999, the three major TFT-LCD producers in Korea became two, when LG Electronics merged with Hyundai. The year 1999 also saw an additional merger involving LG Electronics when that company created a joint venture with Philips that would be known as LG.Philips.

#### 4. 2000 - 2001

123. By January of 2000, prices for TFT-LCD Products were falling again. The price decline in this period was substantially influenced by the entry of six new Taiwanese competitors, including Chi Mei, Chunghwa, HannStar, and Acer Display Technology, Inc. (later part of AU Optronics). Taiwanese defendants began their entry into the market in

1 late 1999 and early 2000, by undercutting the collusively high prices of the other  
2 defendants to gain immediate market share. However, by late 2001 to early 2002, the  
3 Taiwanese defendants had increased their market share to the point that it made sense to  
4 participate in the conspiracy, and they then moderated the volume of their production.

5 124. Concurrent with the entry of the Taiwanese firms, the Koreans, just as the  
6 Japanese had done earlier, were investing in Taiwanese manufacturing capacity. Two of  
7 the largest Korean firms announced plans to invest billions in Taiwanese TFT-LCD panel  
8 production and to locate manufacturing facilities in Taiwan.

9 125. Newer generation fabs reduced costs and provided opportunities for  
10 additional profits at cartelized prices. In fact, a leading industry research house indicated  
11 that LCD manufacturers would pour \$5 billion into new manufacturing in 2000, which is  
12 comparable to the amount the industry spent in the previous three years combined.

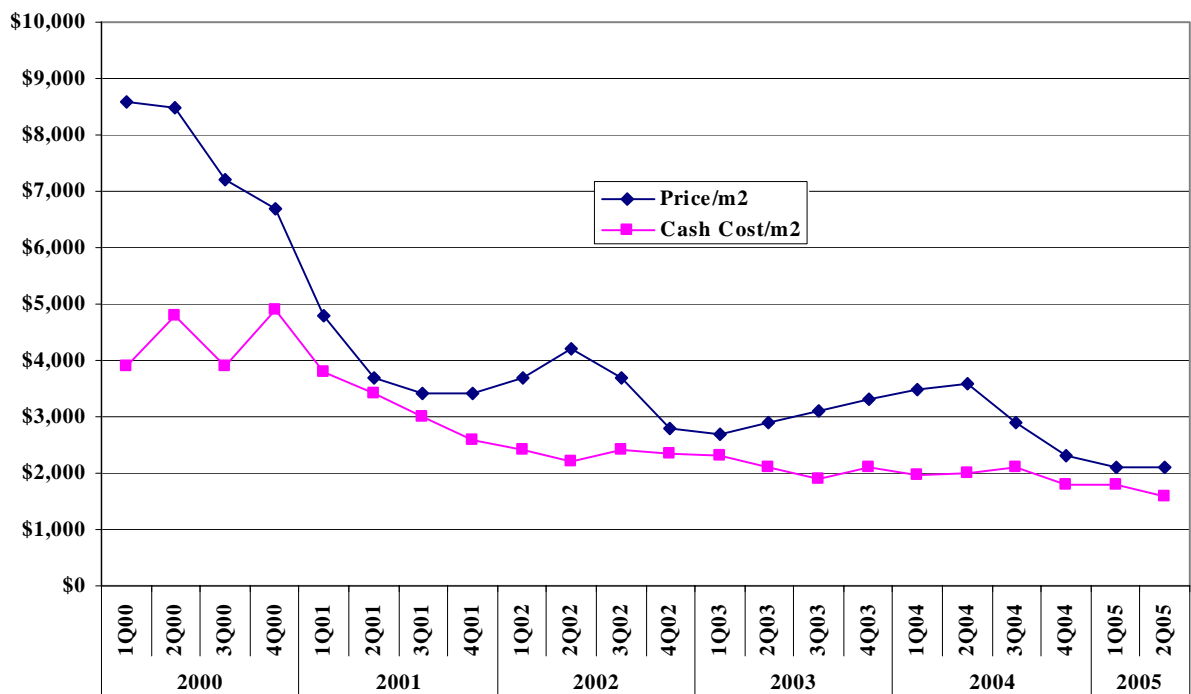
13 126. In October 2000, *The Korea Herald* reported that, "IDC estimates that the  
14 global LCD supply is one to two percent in excess and the unbalance will rise to seven  
15 percent next year as manufacturers continue to book their output."

16 127. Then, despite what was billed as massive and growing overcapacity in 2000  
17 and early 2001, prices of TFT-LCD panels stopped declining in mid-2001, and actually  
18 rose. In late 2001, a senior official at LG.Philips stated that the global market faced a  
19 supply shortage, and that this would "rapidly resolve the industry's oversupply and  
20 improve its profitability." Similarly, industry insiders suggested that the price increases  
21 were the result of an inability to meet increased demand. However, published data for  
22 2001 showed that several defendants were operating their fabs significantly below  
23 capacity. For example, Chunghwa had a 75.3 percent utilization rate and Quanta Display  
24 (which later merged with AU Optronics) had a 52 percent utilization rate. Based on the  
25 data indicating reduced capacity utilization during a time of rising prices and supposedly  
26 tight supply, the Taiwanese firms had begun actively cooperating with Japanese and  
27 Korean incumbents to restrict supply. Again, defendants reacted to the price trough by  
28 conspiring to fix prices.



128. The rise in prices made no economic sense at this point in time and was the product of defendants setting the price of TFT-LCD Products by agreement. First, defendants were bringing new plants on line that utilized larger motherglass which was more cost effective. Second, as reported by an industry source, the variable cost of producing TFT-LCDs was declining during the later part of 2001 and into 2002. With lower production costs and capacity to spare, it made little economic sense for defendants to not utilize their full capacity other than agreement by them not to do so. The chart below compares the variable costs of production per square meter of motherglass with the price per square meter of finished TFT-LCDs during the same period.

**Price/m<sup>2</sup> and Cash Cost/m<sup>2</sup> Development for a Tier-1 Maker**



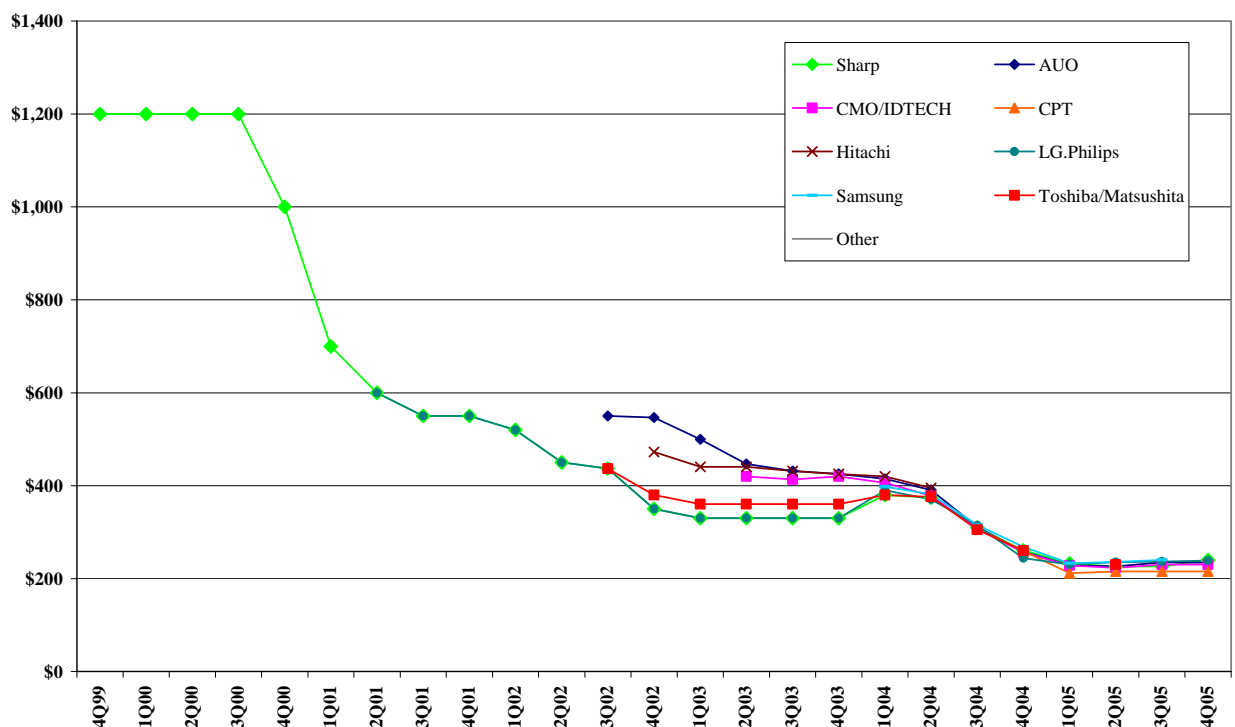
Source: DisplaySearch, "TFT LCD Business Cycles and Trends".

## 5. 2002 - 2003

129. Prices continued to rise from the second half of 2001 into the second half of 2002. Industry analysts attributed these price increases to a "larger-than-expected panel shortage," despite continuing capacity expansion.

130. By the second half of 2002, the cartel's success at propping up prices led to lagging demand, and the cartel's response was to let prices level off and even begin to fall. Such downward price trends are not inconsistent with a monopoly or cartel. For example, the chart below depicts defendant Sharp steadily dropping the prices on 20-inch televisions during a two-year period when it was the only company making that product, and one of only two companies making any TFT-LCD televisions larger than 15.2 inches.

**Quarterly ASP by Manufacturer for 20.0" LCD TVs**



131. Throughout 2002, industry leaders shifted to fifth generation motherglass production technology. According to officials at Samsung, "[t]he new fifth-generation facilities offer panels that are 11.5 times bigger in size than those of the first-generation production line, while production cost is 20 percent lower than the fourth-generation counterpart because of the decrease in number of necessary parts."

132. Industry analysts took note of the unusual trends in the pricing of TFT-LCD Products. In February 2004, CNET.com quoted an analyst from IDC, a market research firm, as saying that, "LCD is one of the few [markets] where things have actually gone up

1 in price." As described in Section VIII below, defendants explained these prices increases  
2 with false statements about market conditions in order to cover up the conspiracy.

3 133. During five consecutive quarters in 2003 and 2004, TFT-LCD Product prices  
4 rose significantly. AU Optronics reported that the price for certain of its TFT-LCD  
5 Products increased 28 percent between the second quarter of 2003 and the second quarter  
6 of 2004. Similarly, LG.Philips reported that its pricing increased by 21 percent over the  
7 same period. This price increase can be seen in the chart at paragraph 117 entitled,  
8 *Average Selling Price of High-Volume LCD Monitors and Notebook LCDs*.

9 134. These soaring prices resulted in similar increases in the profits reaped by the  
10 TFT-LCD Product manufacturers. For example, the eight largest TFT-LCD Product  
11 manufacturers reported a collective profit increase of 740 percent between the second  
12 quarter of 2003 and the second quarter of 2004. These record profits resulted from  
13 defendants' collective action to fix, raise, maintain or stabilize the price of TFT-LCD  
14 Products. Again, the sharing of information about price and production, the under  
15 utilization of capacity, and restraints of output drove up the prices of TFT-LCDs.

16 135. Around this time, industry analysts suggested that there were too many  
17 competitors in the TFT-LCD Product marketplace. Some industry participants went as far  
18 as overtly suggesting that the industry should seek to curtail supply through mergers.  
19 These suggestions were carried out. Significant consolidation and collaboration among  
20 competitors in the TFT-LCD Product market occurred.

21 136. While TFT-LCD Product prices were increasing in late 2003, AU Optronics,  
22 Chi Mei, and HannStar decreased capacity utilization.

23 137. As noted above, Toshiba Corporation and Matsushita Electric Industrial Co.,  
24 Ltd. merged their TFT-LCD operations. The joint venture announced plans to solicit  
25 investment from other companies involved in the production of TFT-LCD panels,  
26 including device manufacturers and material suppliers. NEC formed an alliance with  
27 Casio. In addition, Taiwanese TFT-LCD manufacturers agreed to supply Matsushita  
28 Electric Industrial Co., Ltd. with TFT-LCD panels for use in televisions.

1           138. Consolidation and collaboration continued in 2003 as Chi Mei bought  
2 Japan's IDT, a former subsidiary of IBM, and AU Optronics purchased a 20 percent stake  
3 in Japan's Fujitsu Display Technology.

4           139. Despite the increased efficiency and costs savings of fifth generation fabs,  
5 the industry experienced higher prices in 2003, purportedly because of a shortage of the  
6 most popular sizes of TFT-LCD panels. In order to keep prices artificially high,  
7 defendants chose not to operate at full capacity nor take advantage of lower variable costs.

8           **6. 2004**

9           140. Pursuant to defendants' agreement to fix and stabilize prices, prices  
10 continued to rise during the first half of 2004. In fact, between 2003 and mid-2004, panel  
11 prices increased for five consecutive quarters.

12           141. The cartel's success at raising prices slowly dampened demand. In response,  
13 the cartel allowed prices to once again level off and began to decline in the second half of  
14 2004. During this period of time, the market for TFT-LCD televisions started to grow,  
15 with the 32-inch panel representing approximately 9 percent of the market.

16           142. In late 2004, AU Optronics reduced financial forecasts, claiming that  
17 overcapacity-driven price declines were eroding profits. AU Optronics publicly  
18 announced plans to reduce capacity at its sixth generation fabs by 30 percent and to delay a  
19 planned seventh generation facility.

20           143. Consolidation and collaboration among and between competitors continued  
21 as Samsung and Sony launched their joint venture, named S-LCD Corp.

22           **7. 2005**

23           144. Based on cartelized prices and the industry's need for next generation fabs,  
24 analysts widely predicted a continuing period of oversupply and declining prices  
25 throughout 2005. However, by the third quarter of 2005, it was clear that the industry was  
26 not facing oversupply, but rather was reaping the benefits of a panel shortage and stable, or  
27 increasing, panel prices.

28       ///

1 145. By 2005, 15-inch notebooks had surpassed 14-inch notebooks as the  
 2 predominant product, and the volume of 32-inch panels for televisions took off as well. In  
 3 2005, 32-inch panels represented almost 27 percent of sales.

4 146. Around this time, Samsung announced its intention to increase production of  
 5 40-inch TFT-LCD panels from 20,000 units in the second quarter to 150,000 units in the  
 6 fourth quarter. This increase included an immediate increase to 100,000 units the very  
 7 next month. Samsung's ability to immediately increase output so significantly  
 8 demonstrates how quickly manufacturers could ramp up capacity and increase utilization.

9 147. Analysts forecasted excess production capacity in 2005 because of large  
 10 TFT-LCD plants from Samsung and LG.Philips being brought on line. However, Sharp  
 11 executive director Toshishige Hamano reported in October 2005 that the supply of LCD  
 12 panels, particularly for use in televisions larger than 32 inches, would fall short of demand  
 13 by 15 to 30 percent. The shortage came as a surprise to analysts.

14 148. This shortage was the result of collusion among defendants. Dr. Hui Hsiung,  
 15 Executive Vice-President and Director of AU Optronics, admitted in November of 2005  
 16 that his company persuaded its competitors to lower the inventory for TFT-LCD Products:

17 I think our policy, our strategy, has always been minimizing our inventory  
 18 and that turned out to be quite successful in past few years by keeping the  
 19 inventory lower. And I think in the past we did have some problem  
 20 convincing our competitors doing the same thing. *But in recent months,*  
 21 *especially this year, actually, it did start to happen. I think that the*  
 22 *industry understand[s] the benefit of keeping the capacity low.* Again, even  
 23 if the scenario does happen that we have a 5% over capacity this is not the  
 24 drastic action to reduce about 5% of the loading. And this, coupled with  
 25 the fact that many of the product cost structure is some 80% are actually  
 26 material costs. So, fixed costs at 20% if you reduced the 5%, even 10%,  
 27 loading, that impact on cost is actually, not very big. . So, we think the  
 28 industry become more mature. That is precisely what our competitors  
 would do.

[Emphasis added.]

149. Indeed, earlier that year, spokespersons for LG.Philips and Samsung had  
 predicted the market stabilization that Dr. Hsiung subsequently acknowledged, thus  
 indicating that those companies were among those with which AU Optronics had had  
 discussions.

1           150. A Samsung presentation from November of 2005 made by Sang-Wan Lee,  
2 the President of Samsung's TFT-LCD Products business, noted that it was possible to  
3 "secure a reasonable amount of profit while following the industry leaders."

4           **8. 2006**

5           151. A temporary oversupply of TFT-LCD Products occurred in 2006, which had  
6 the effect of reducing prices in the short term. Again, in the face of a price trough,  
7 defendants fixed and stabilized prices through their cartel activities. On May 25, 2006, at a  
8 Taiwanese trade show, Mr. Hsiung of AU Optronics stated publicly that his company was  
9 reducing production of those products in order to avoid further price erosion. He  
10 expressed the view that his competitors should follow suit, saying that production ought to  
11 be reduced by at least 15 percent. Eddie Chen, a spokesperson for Chi Mei who was  
12 present at the trade show, promised to take similar steps in conjunction with his company's  
13 peers. A June 13, 2006 article in *InfoWorld* noted that as a result of Mr. Hsiung's  
14 statements, "[t]he chatter is growing louder each day."

15           152. Chi Mei was not the only one to follow AU Optronics' invitation to restrict  
16 the output and increase the prices of TFT-LCD Products. In May of 2006, in discussions  
17 between executives of the two companies, AU Optronics convinced Quanta Display, a  
18 company that it acquired in October of 2006, to reduce production of TFT-LCD Products.  
19 By June of 2006, LG.Philips also announced plans to cut production of TFT-LCD  
20 Products.

21           153. Despite the fact that certain of the defendants may have cut back on, or  
22 discontinued, their conspiratorial conduct in 2006 upon the commencement of the  
23 governmental investigations described below, the impact of the conspiracy continued at  
24 least through the end of that year. This carryover in the antitrust injury was due, in part, to  
25 the nature of the pricing mechanisms in the industry, such as supply contracts.

26 ///

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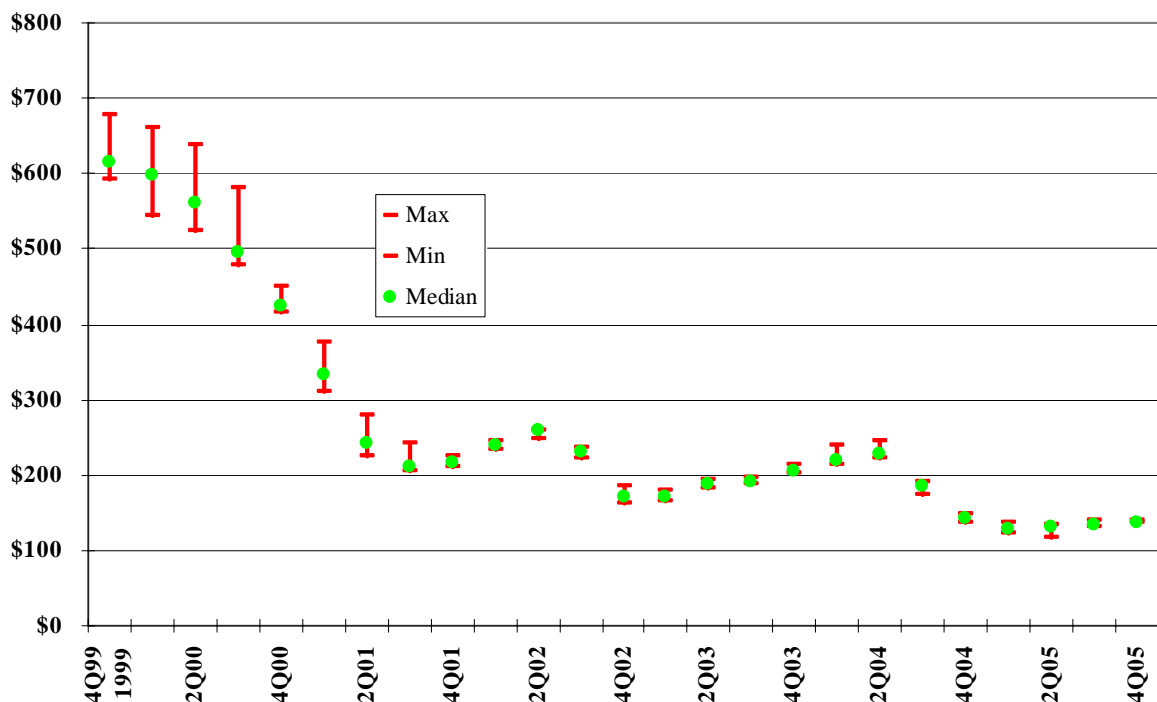
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## **E. Convergence of Prices for Certain TFT-LCD Products**

154. Defendants' TFT-LCD cartel evolved over time. Defendants' initiated their cartel when TFT-LCD Products were in their relative infancy. At that time, defendants balanced the desire to set prices collusively with the industry desire to establish their products in the marketplace. As the cartel matured, new entrants were assimilated, and production costs declined. At the same time, conspirators learned how they could best mitigate the crystal cycle by collaborating on prices and output.

155. The effect of the conspiracy can be seen both in the way prices followed each other as depicted in the chart at paragraph 117, and also in the manner in which prices for particular products converged as the conspiracy progressed. The chart below, which relates to 15-inch computer monitors, illustrates how the price dispersion amongst defendants lessened as the conspiracy matured.

**Dispersion of Manufacturer ASPs for 15.0" LCD Monitors**



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**F. The Role of Trade Associations During the Conspiracy Period**

156. The TFT-LCD industry is served by several major trade organizations that put on industry-wide meetings several times a year. These meetings have facilitated collusion, and the trade associations have themselves functioned as a means for defendants to cooperate and discuss prices.

157. One such trade association is the Taiwan TFT-LCD Association ("TTLA"), to which AU Optronics, Chi Mei, and HannStar all belong. Founded in 2000, TTLA's self-described mission is to "assist [] [the] TFT-LCD industry, condensing the consensus through various activities, promoting the cooperation within competition, acting as a window for interaction with international organization[s] and promoting the integrated growth to [the]whole display industry." TTLA's annual fiscal plans refer repeatedly to one of its activities being the "call[ing of] international meeting[s] on TFT-LCD field and invit[ing] JAPAN and Korea TFT LCD affiliations to visit TTLA." Thus, TTLA was not merely a trade association that provided an opportunity to conspire, it was a vehicle by which the conspiracy was effectuated and implemented.

158. South Korean manufacturers, including LG.Philips and Samsung, had similar trade associations during the Class Period, known as EDIRAK (the Electronic Display Industrial Research Association of Korea) and KODEMIA (the Korea Display Equipment Material Industry Association). EDIRAK's stated goal was "promoting co-activity with foreign Organizations related to display industries." Since 1996, EDIRAK had a cooperation pact with the United States Display Consortium ("USDC"). In describing that pact, Malcolm Thompson, then Chairman of USDC's governing board, said "[e]ven competitors should cooperate on common issues."

159. Japanese manufacturers of TFT-LCD Products have a similar organization of their own. The Semiconductor Equipment Association of Japan ("SEAJ"), founded in 1995, serves Japanese manufacturers of TFT-LCD Products. Its members include Sharp, Toshiba, NEC, Hitachi, and a Japanese subsidiary of Samsung. Like the KDIA and TTLA, the SEAJ was not merely a trade association that provided an opportunity to conspire, it

1 was a vehicle by which the conspiracy was effectuated and implemented.

2       160. In addition to these national trade associations, the Society for Information  
3 Display ("SID") put on multiple meetings each year that are attended by executives from  
4 all of the major producers. One of these meetings had been known as the SID Symposium,  
5 but was renamed the "SID International Symposium and Business Conference." SID also  
6 puts on a long-running conference called the International Display Research Conference  
7 ("IRDC"). These conferences are held at various locations around the world, and the  
8 IRDC conference moves in a three-year rotation between Asia, North America, and  
9 Europe.

10       161. The 2004 SID International Symposium and Business Conference ("SID  
11 2004") featured a presentation entitled "Beyond the Crystal Gateway," by H.B. Chen,  
12 President and CEO of AU Optronics. This was followed shortly by a presentation entitled  
13 "The FPD Capital Equipment Investment Environment," which told the attendees about  
14 "investments planned at the major display manufacturers." A representative of  
15 DisplaySearch also spoke about the LCD market. There were presentations by analysts  
16 from iSuppli/Stamford Resources, and other industry experts. This was all followed by a  
17 "networking reception – sponsored by LG.Philips LCD," to which all conference attendees  
18 were invited to participate.

19       162. SID 2005 featured a reprise of the SID 2004 speech by H.B. Chen of AU  
20 Optronics. This time it was called "2005: Beyond the Crystal Gateway." A DisplaySearch  
21 representative, again provided "the latest outlook for flat panel displays covering pricing,  
22 demand, and supply . . . and the cost and margin outlook for key FPDs will be projected."  
23 Again, these discussions about the market were followed by a "networking reception."  
24 Among the attendees at SID 2004 were Bruce Berkoff of LG.Philips, Jun Souk and Dong-  
25 Hun Lee of Samsung, H.B. Chen of AU Optronics, Larry Weber of Matsushita, and Joel  
26 Pollack of Sharp. Senior executives from Sharp and Hitachi also attended.

27       163. The SID 2005 conference was very similar to SID 2004 but was even more  
28 blatant in its discussion of the crystal cycle. Jun H. Souk, Executive Vice-President of

1 Samsung, gave a presentation entitled "Managing the Crystal Cycles," which was  
 2 paraphrased as follows: "By reviewing what happened during the business up and down  
 3 cycles of the LCD in the past, we have learned lessons that will reduce the burden in future  
 4 cycles. Efforts made in cost reduction, line-investment timing, and new market generation  
 5 will be described."

6 164. SID 2005 provided a prime opportunity for one of the dominant  
 7 manufacturers to describe the management of supply in the marketplace tied to "line-  
 8 investment timing," to all of its key competitors. Among the attendees at SID 2005 were  
 9 Bruce Berkoff of LG.Philips and Sang Wan Lee, Jun Souk, and Joe Virginia of Samsung.  
 10 SID 2005 also featured presentations regarding development in LCD technology by  
 11 officials from AU Optronics, Sharp, LG.Philips, Samsung, and Hitachi.

12 165. The conspiracy was also carried out at the annual meetings of the Global  
 13 FPD Partners' Conference ("GFPC"), which have been held since 2005. The initial  
 14 conference was held in March of 2005 in Tokyo and the 2006 conference was held on  
 15 February 28 - March 3, 2006 in Okinawa, Japan.

16 166. Participants in the 2006 GFPC noted how successful the event was in  
 17 promoting information exchanges and "networking" among the co-conspirators:

18 What people said about GFPC 2006

19 'The conference provided an excellent opportunity to exchange information  
 20 and meet people from the global display industry.'

21 'GFPC 2006 proved to be a good forum overall for open information  
 exchange and networking.'

22 'The roundtable discussion provided good opportunities to positively  
 23 participate in the conference.'

24 'I enjoyed communicating and exchanging information with the conference  
 attendees about the global FPD industry.'

25 'GFPC is an excellent venue for exchanging information and discussing  
 26 ideas and opinions with other companies in the FPD industry.'

27 167. Or, as Dr. Hui Hsiung has said, "[i]n an industry growing as rapidly as the  
 28 flat panel display industry, it is increasingly important to build connections across the

1 supply chain and around the world . . . the GFPC plays a vital part in building those  
2 connections and growing our business."

3 168. Among the participants at GFPC 2006 were Mr. Souk and Ho Kyoon Chung  
4 of Samsung, Shigaeki Mizushima of Sharp, Kiyoshi Jan-o of NEC, Mr. Ogura of Toshiba  
5 Matsushita, Yoshihide Fuji of Toshiba, Mr. Nakajima of Matsushita, and Dr. Hui Hsiung  
6 of AU Optronics.

7 169. As indicated by the public pronouncements, these trade association meetings  
8 facilitated the conspiracy by giving defendants further opportunities to discuss prices and  
9 output.

#### 10 **G. International Antitrust Investigations**

11 170. Defendants' conspiracy to restrict artificially the output of, and raise the  
12 prices for, TFT-LCD Products sold in the United States during the Class Period, is  
13 demonstrated by a multinational investigation commenced by the United States  
14 Department of Justice ("DOJ") and others in late 2006.

15 171. In December of 2006, authorities in Japan, Korea, the European Union, and  
16 the United States revealed the existence of a comprehensive investigation into anti-  
17 competitive activity among TFT-LCD manufacturers. In a December 11, 2006 filing with  
18 the Securities and Exchange Commission, defendant LG.Philips disclosed that officials  
19 from the Korea Fair Trade Commission and Japanese Fair Trade Commission ("JFTC")  
20 had visited the company's Seoul and Tokyo offices and that the DOJ had issued a subpoena  
21 to its San Jose office.

22 172. On December 12, 2006, news reports indicated that in addition to  
23 LG.Philips, defendants Samsung, Sharp, Epson, and AU Optronics were also under  
24 investigation. The JFTC stated that the probe was related to price-fixing. On that same  
25 date, the European Commission confirmed publicly that it as well was investigating the  
26 possibility of a cartel agreement and price-fixing among manufacturers of TFT-LCD  
27 Products.

28 ///

1           173. According to a news report from Bloomberg.com, a spokeswoman for the  
2 DOJ acknowledged that it was "investigating the possibility of anticompetitive practices"  
3 and cooperating with foreign authorities.

4           174. In a contemporaneous news report in *The International Herald Tribune*,  
5 "Min Chun Hong, an analyst at Goodmorning Shinhan Securities, said that if the  
6 companies [Samsung and LG.Philips] were convicted, penalties could amount to about 200  
7 billion won, or \$216 million, each."

8           175. Michael Min, an analyst at Korea Investment and Securities, was quoted by  
9 *The Washington Post* as saying that the investigation may be focused on a period over  
10 several years when manufacturers of TFT-LCD Products were charging comparable prices.

11           176. Many of the named defendants have been implicated in other investigations  
12 of cartel activity in recent years. For example, Samsung admitted guilt and paid a \$300  
13 million fine following an investigation by the DOJ into price-fixing among manufacturers  
14 of dynamic random access memory ("DRAM") computer chips. In addition, Samsung,  
15 Hitachi, and Toshiba have all acknowledged being contacted by the DOJ as part of an  
16 ongoing investigation into collusion among manufacturers of static random access memory  
17 ("SRAM") computer chips. Most recently, the DOJ has commenced an investigation of  
18 Samsung, Toshiba, and Hitachi, among others, concerning collusion among manufacturers  
19 of NAND flash memory.

20           177. The investigations into the TFT-LCD industry are not mere information  
21 gathering efforts by regulatory authorities. In the DRAM case, for example, the DOJ's  
22 investigation resulted in multiple guilty pleas, jail time for industry executives, and over  
23 \$700 million in criminal fines. As the DOJ's representative told this Court at the  
24 September 19, 2007 hearing, the DOJ's investigation into the TFT-LCD industry is  
25 premised in part on insider information that presents a detailed "road map" of the  
26 conspiracy. Plaintiffs hereby incorporate by reference the *in camera* submissions made by  
27 the DOJ to this Court that have been represented to explain the contours of this conspiracy.  
28 Given the information that the DOJ already has from insiders, the investigation is likely to

1 lead to criminal indictments and/or informations and resultant fines, just as occurred with  
2 respect to manufacturers of DRAM.

### 3 **VIII. FRAUDULENT CONCEALMENT**

4 178. Plaintiffs had neither actual or constructive knowledge of the facts  
5 constituting their claim for relief despite diligence in trying to discover the pertinent facts.  
6 Plaintiffs and members of the Class did not discover, and could not have discovered  
7 through the exercise of reasonable diligence, the existence of the conspiracy alleged herein  
8 until December 2006, when investigations by the DOJ and other antitrust regulators  
9 became public. Defendants engaged in a secret conspiracy that did not give rise to facts  
10 that would put plaintiffs or the Class on inquiry notice that there was a conspiracy to fix  
11 prices for LCDs.

12 179. As alleged above, defendants had secret discussions about price and output.  
13 Defendants agreed not to publicly discuss the nature of the scheme and gave pretextual  
14 justifications for the inflated prices of LCDs in furtherance of the conspiracy.

15 180. Defendants have used a variety of other purportedly market-based  
16 explanations for price increases in order to conceal their conspiracy. In 1999, Joel Pollack,  
17 a marketing manager for Sharp, blamed the sharp price rises of early 1999 on under-  
18 capitalization:

19 Prices have dropped at a steady rate over the past couple of years to the  
20 point where it was difficult to continue the necessary level of capitalization.  
The [low prices] have starved the industry.

21 181. Also, in early 1999, Omid Milani, a marketing manager for NEC, stated that  
22 "demand by far is outstripping our supply capability" and predicted that "prices will  
23 continue to increase until a reasonable balance is achieved."

24 182. Another rationale for the steep price hikes of 1999 was offered by Yoon-  
25 Woo Lee, CEO of Samsung. He claimed that the demand for larger panels was reducing  
26 the industry's capacity because each display ate up more square inches of motherglass  
27 substrate.

28 / / /

183. Also in 1999, Boch Kwon, Vice President of LG.Philips' Sales Division, and Yoon-Woo Lee, President and CEO of Samsung's Semiconductor Division falsely reported that price increases were due to "acute" shortages.

184. On February 4, 2001, Bruce Berkoff, Executive Vice-President at LG.Philips was quoted by News.com as saying that price increases were due to shortages. He claimed, "demand grew so fast that the supply can't keep up."

185. In the latter half of 2001, Koo Duk-Mo, an executive at LG.Philips, predicted a 10 to 15 percent price hike purportedly due to increased demand for the holiday season.

186. Hsu Jen-Ting, a Vice-President at Chi Mei, and Chen Shuen-Bin, president of AU Optronics, offered another rationale for the 2001 price hike in an interview for the *Taiwan Economic News* in October 2001. They blamed "component shortages due to the late expansion of 5th generation production lines and new demand from the replacement of traditional cathode ray tubes with LCD monitors."

187. These explanations were pretextual and served to cover up the conspiracy. Later price increases were explained by industry leaders as coming from new demand for LCD televisions. In 2005, Koo Duk-Mo of LG.Philips stated "[w]e are seeing much stronger demand for large-size LCD TVs than expected, so LCD TV supply is likely to remain tight throughout the year."

188. As a result of defendants' fraudulent concealment of their conspiracy, the running of any statute of limitations has been tolled with respect to any claims that plaintiffs and the Class members have as a result of the anticompetitive conduct alleged in this Complaint.

## **IX. CLAIM FOR VIOLATIONS OF 15 U.S.C. § 1**

189. Plaintiffs incorporate by reference all the above allegations as if fully set forth herein.

190. Beginning in at least January 1, 1996, the exact date being unknown to plaintiffs and exclusively within the knowledge of defendants, defendants and their co-conspirators entered into a continuing contract, combination or conspiracy to unreasonably



1 restrain trade and commerce in violation of Section 1 of the Sherman Act (15 U.S.C. § 1)  
 2 by artificially reducing or eliminating competition in the United States.

3 191. In particular, defendants have combined and conspired to raise, fix, maintain  
 4 or stabilize the prices of TFT-LCD Products sold in the United States.

5 192. As a result of defendants' unlawful conduct, prices for TFT-LCD Products  
 6 were raised, fixed, maintained and stabilized in the United States.

7 193. The contract, combination or conspiracy among defendants consisted of a  
 8 continuing agreement, understanding and concerted action among defendants and their co-  
 9 conspirators.

10 194. For purposes of formulating and effectuating their contract, combination or  
 11 conspiracy, defendants and their co-conspirators did those things they contracted,  
 12 combined, or conspired to do, including:

- 13 a. Participating in meetings and conversations to discuss the prices and  
 14 supply of TFT-LCD Products;
- 15 b. Communicating in writing and orally to fix prices;
- 16 c. Agreeing to manipulate prices and supply of TFT-LCD Products sold  
 17 in the United States in a manner that deprived direct purchasers of  
 18 free and open competition;
- 19 d. Issuing price announcements and price quotations in accordance with  
 20 the agreements reached;
- 21 e. Selling TFT-LCD Products to customers in the United States at non-  
 22 competitive prices; and
- 23 f. Providing false statements to the public to explain increased prices for  
 24 TFT-LCD Products.

25 195. As a result of defendants' unlawful conduct, plaintiffs and the other members  
 26 of the Class have been injured in their businesses and property in that they have paid more  
 27 for TFT-LCD Products than they otherwise would have paid in the absence of defendants'  
 28 unlawful conduct.

**X. PRAYER FOR RELIEF**

WHEREFORE, plaintiffs pray that the Court enter judgment on their behalf and on behalf of the Class herein, adjudging and decreeing that:

A. This action may proceed as a class action, with plaintiffs as the designated Class representatives and their counsel as Class Counsel;

B. Defendants have engaged in a contract, combination, and conspiracy in violation of Section 1 of the Sherman Act (15 U.S.C. § 1), and that plaintiffs and the members of the Class have been injured in their business and property as a result of defendants' violations;

C. Plaintiffs and the members of the Class recover damages sustained by them, as provided by the federal antitrust laws, and that a joint and several judgment in favor of plaintiffs and the Class be entered against the defendants in an amount to be trebled in accordance with such laws;

D. Defendants, their subsidiaries, affiliates, successors, transferees, assignees and the respective officers, directors, partners, agents, and employees thereof and all other persons acting or claiming to act on their behalf be permanently enjoined and restrained from continuing and maintaining the combination, conspiracy, or agreement alleged herein;

E. Plaintiffs and members of the Class be awarded pre-judgment and post-judgment interest, and that such interest be awarded at the highest legal rate from and after the date of service of the initial complaint in this action;

F. Plaintiffs and members of the Class recover their costs of this suit, including reasonable attorneys' fees as provided by law; and

G. Plaintiffs and members of the Class receive such other or further relief as may be just and proper.

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**XII. JURY TRIAL DEMANDED**

Pursuant to Federal Rule of Civil Procedure 38(b), plaintiffs demand a trial by jury of all of the claims asserted in this Complaint so triable.

Dated: November 5, 2007

By: /s/ Bruce L. Simon

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